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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MICHAEL A DESANCTIS
HAMILTON DESANCTIS & CHA LLP
FINANCIAL PLAZA AT UNION SQUARE
225 UNION BOULEVARD, SUITE 305
LAKEWOOD, CO 80228

EXAMINER	
VIANA DI PRISCO, GERMAN	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/650,298	DESAI ET AL.	
	Examiner	Art Unit	
	GERMAN VIANA DI PRISCO	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8,14-21 and 23-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8,14-21 and 23-26* is/are rejected.

7)☒ Claim(s) *27-32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/24/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 5, 6, 21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tofano (Unites States Patent No.: US 6,625,169 B1) in view of Solomon et al. ("Solomon", United States Patent No.: US 7,386,010 B2), and further in view of Deikman et al. ("Deikman", United States Patent Application Publication No.: US 2003/0185221 A1).

Consider claims 1, 21 and 26, Tofano discloses a method to bridge network packet media, comprising: receiving a first network packet from a first media channel via a first network interface 222 (figure 5 and column 13 lines 32-35);receiving a second network packet from a second media channel via a second network interface 223(figure 5 and column 13 lines 32-35); relaying the first network packet and the second network packet to a first shared processing resource 228 (figure 5 and column 13 lines 19-22);

and using an application accessible to the first shared processing resource to bridge the first network packet to the second media channel via the second network interface and the second network packet to the first media channel via the first network interface, by translating the first network packet from a first packet format associated with the first media channel (first network interface 2230 to a first intermediate packet (third common format) (column 13 lines 23-50, column 15 lines 47-56 and column 16 lines 4-7);translating the second network packet from a second packet format associated with the second media channel (second network interface 226) to a second intermediate packet (third common format) having the Ethernet media format (column 13 lines 23-50, column 15 lines 47-56 and column 16 lines 4-7); translating the first intermediate packet from the Ethernet media format to a first outbound network packet having the second packet format: and translating the second intermediate packet from the Ethernet media format to a second outbound network packet having the first packet format (column 15, lines 45-56 and column 16, lines 37-66).

Even though Tofano teaches incorporating an Ethernet protocol module (column 18, lines 31-35), Tofano does not explicitly disclose that the third common format is an Ethernet media format.

In the same field of endeavor, Solomon teaches a virtual bridge application (multiprotocol converter 44 is programmed in software, Col. 5, ll. 57-60) using an Ethernet media format (figures 1-3 and column 6, lines 1-5). Solomon further discloses using a translation table to translate from Ethernet to Frame Relay and from Frame Relay to Ethernet (Col. 9, ll. 27-42).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an Ethernet media format as taught by Solomon in the system of Tofano to allow endpoints using disparate protocols to communicate with one another.

Nonetheless the combination of Tofano and Solomon does not specifically disclose using a switch fabric; Tofano discloses using software switching. However in the same field of endeavor Deikman teaches a method and system for allowing software designed for a software switch to be used with a hardware switch fabric. One of ordinary skill in the art would have found obvious to incorporate the teachings of Deikman with the teachings of Tofano and Solomon to have the speed of hardware switch fabrics and the flexibility of and ease of use of software switches.

Consider claim 2 and as applied to claim 1 above, Tofano clearly shows and discloses the first media channel being a different media channel from the second media channel (figures 1 and 2 and column 8 line 55 – column 9 line 54).

Consider claim 5 and as applied to claim 1 above Tofano further discloses the application relaying at least one of the network packets to other applications accessible to a second processing resource (first and second processing means are operable connected, hence, working together and sharing information) in order to assist in bridging between the media channels (one performs data format translations while the other assists in switching data) (figure 5 and column 39 lines 38-49).

Consider claim 23 and as applied to claim 22, Tofano further discloses using a Graphical User Interface (GUI) application (col. 31, lines 38-43).

Consider claim 24, and as applied to claim 21 above, Solomon further discloses using an Ethernet header data (figures 1-3 and column 6, lines 1-5).

Consider claim 25, and as applied to claim 24 above, Solomon further discloses using the Ethernet header data to translate the received network packets from an originally received media format to an intermediate Ethernet media format; selecting one of the mappings in the data structure based in a desired output media format (Col. 9, ll. 27- 42), and translating from the intermediate Ethernet media format to an outbound media format (figures 1-2, and column 2, lines 1-31).

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tofano (Unites States Patent No.: US 6,625,169 B1) in view of Solomon et al. ("Solomon", United States Patent No.: US 7,386,010 B2), and of Deikman et al. ("Deikman", United States Patent Application Publication No.: US 2003/0185221 A1), and further in view of Macera et al. ("Macera", United States Patent No.: 5,490,252).

Consider claim 3, and as applied to claim 1 above, Tofano as modified by Solomon and further modified by Deikman does not explicitly disclose that the processing resource uses metadata associated with each of the media channels to translate the network packets between the media channels.

In the same field of endeavor Macera discloses an internetworking system wherein the processing resource uses metadata (canonical headers), associated with each of the media channels to translate the network packets between the media channels (column 21, lines 63-65).

Therefore it would have been obvious to a person of ordinary skill in the art at the time
the invention was made to use metadata as disclosed by Macera in the system of Tofano as modified by Solomon and further modified by Deikman in order to exchange information between various networks and various network formats.

Consider claim 4, and as applied to claim 3 above, Solomon teaches using an Ethernet media format (figures 1-3 and column 6, lines 1-5).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tofano (Unites States Patent No.: US 6,625,169 B1) in view of Solomon et al. ("Solomon", United States Patent No.: US 7,386,010 B2), and of Deikman et al. ("Deikman", United States Patent Application Publication No.: US 2003/0185221 A1), and further in view of Picazo, Jr. et al. ("Picazo", United States Patent No.: 5,841,990).

Consider claim 8 and as applied to claim 1 above Tofano discloses that the processing resource and the network interfaces are implemented in at least one of a network router, a network switch, and a high-density server.

In the same field of endeavor, Picazo discloses an integrated bridge/router 34 (figure 1 and column 6, lines 62-64).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the processing resource and the network interfaces that provide the bridging function in a network router as disclosed by Picazo in the system of Tofano as modified by Solomon and further modified by Deikman in order to reduce expenses, simplify management and reduce the number of points of potential failures in the network.

6. Claims 14, 15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tofano (Unites States Patent No.: US 6,625,169 B1)and further in view of Solomon et al. ("Solomon", United States Patent No.: US 7,386,010 B2).

Consider claim 14, Tofano discloses a network packet media bridging system, comprising: a plurality of network interfaces, wherein each network interface of the plurality of network interfaces accepts network packets from a different media transmission channel(figure 3 and column 10 lines 62-67); and a bridging application that is accessible to a single processing resource for receiving the network packets from the network interfaces and for translating the network packets between media formats for delivery to a plurality of heterogeneous media transmission channels (column 13 lines 23-26, column 15 lines 47-56, column 16 lines 4-7).

Even though Tofano teaches incorporating an Ethernet protocol module (column 18, lines 31-35), Tofano does not explicitly disclose that Ethernet is used for translating the network packets.

In the same field of endeavor, Solomon teaches using an Ethernet media format (figures 1-3 and column 6, lines 1-5).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an Ethernet media format as taught by Solomon in the system of Tofano to allow endpoints using disparate protocols to communicate with one another.

Consider claim 15, and as applied to claim 14 above, Tofano further teaches that the bridging application is dynamically instantiated and configurable within the processing resource (by means of a GUI or by automatic software modules running in the processing resource, column 31, lines 38-50).

Consider claim 18, and as applied to claim 14 above, Tofano further discloses communicating with one or more additional processing resources having one or more additional applications in order to translate the network packets between the media formats (second processor 229 in figure 5 and column 16, lines 18-36).

Consider claim 19, Tofano further discloses that the media formats include an Asynchronous Transfer Mode (ATM) format (figure 3).

Consider claim 20 and as applied to claim 14 above Tofano clearly shows and discloses a virtual bridge application accessible to the processing resource to bridge between the media channels (a software program provides intelligent and transparent exchanges between different network formats, essentially providing a virtual bridge)(column 13 lines 27).

Even though Tofano teaches incorporating an Ethernet protocol module (column 18, lines 31-35),Tofano does not explicitly disclose that Ethernet is used for translating the network packets.

In the same field of endeavor, Solomon teaches using an Ethernet media format (figures 1-3 and column 6, lines 1-5).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an Ethernet media format as taught by Solomon in the system of Tofano to allow endpoints using disparate protocols to communicate with one another.

7. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tofano (Unites States Patent No.: US 6,625,169 B1) and of Solomon et al. ("Solomon", United States Patent No.: US 7,386,010 B2) and further in view of Macera et al. ("Macera", United States Patent No.: 5,490,252).

Consider claim 16, and as applied to claim 14 above, Tofano does not explicitly disclose accessing metadata associated with the network packets, where the metadata is associated with the media formats of the network packets.

In the same field of endeavor Macera et al disclose an internetworking system wherein metadata (canonical headers) associated with each of the media channels to translate the network packets between the media channels (column 21 lines 63-65).

Therefore it would have been obvious to a person of ordinary skill in the art at the

time the invention was made to use metadata as disclosed by Macera et al in the system of Tofano in order to exchange information between various networks and various network formats.

Consider claim 17, and as applied to claim 16 above, Tofano does not explicitly disclose that Ethernet header data is included within the metadata to translate a number of the network packets to an Ethernet format before translating a number of the network packets between the media formats.

In the same field of endeavor Macera discloses using metadata (canonical headers, which may include Ethernet header data since Ethernet is a very well known and widely used networking standard), in the translation of the networks packets to an internal packet format (column 21 lines 63-65). Macera et al do not explicitly disclose that the internal packet format is an Ethernet format, however given that Ethernet is a very well known and widely used networking standard; it would have been obvious to use Ethernet as the internal packet format.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use metadata including Ethernet header data to translate a number of the network packets to an Ethernet format before translating a number of the network packets between the media formats as disclosed by Macera in the system of Tofano in order to exchange information between various networks and various network formats.

Allowable Subject Matter

8. Claims 27-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to the Picazo reference not teaching a translation table have been considered but are moot in view of the new grounds of rejection. The Examiner had indicated previously that a translation table was not disclosed by the combination of Tofano, Solomon and Deikman. However upon further review of Solomon, the Examiner now submits that the claimed translation table is indeed taught in Col. 9, ll. 27-42.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zelig et al. (Pub No.: US 2004/0037279 A1) discloses virtual bridges. Dorsey et al. (Pub. No.: US 2001/0033580 A1) discloses a multi-protocol packet translator. Kelly et al. (Pub. No.: US 2005/0002417 A1) discloses protocol conversions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERMAN VIANA DI PRISCO whose telephone number

is (571)270-1781. The examiner can normally be reached on Monday through Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/German Viana Di Prisco/
Examiner, Art Unit 2617
December 18, 2009

/KAMRAN AFSHAR/

Primary Examiner, Art Unit 2617